

SEQUENCE LISTING

<110> CHUGAI SEIYAKU KABUSHIKI KAISHA

<120> Method for screening compounds inhibiting signal
transduction through inflammatory cytokines

<130> C1-005PCT

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<150> JP 1998-299962

<151> 1998-10-21

<160> 10

<170> PatentIn version 2.0

<210> 1

<211> 2656

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (183)..(1919)

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gggtctcacc cggattgtcc gggtaggcacc gttcccggcc ccaccgggcg ccgcgaggga 180

tc atg tct aca gcc tct gcc gcc tcc tcc tcc tcc tcg tct tcg gcc 227

Met Ser Thr Ala Ser Ala Ala Ser Ser Ser Ser Ser Ser Ser Ala

1 5 10 15

ggt gag atg atc gaa gcc cct tcc cag gtc ctc aac ttt gaa gag atc 275

Gly Glu Met Ile Glu Ala Pro Ser Gln Val Leu Asn Phe Glu Glu Ile

20 25 30

gac tac aag gag atc gag gtg gaa gag gtt gtt gga aga gga gcc ttt 323

Asp Tyr Lys Glu Ile Glu Val Glu Glu Val Val Gly Arg Gly Ala Phe

35 40 45

gga gtt gtt tgc aaa gct aag tgg aga gca aaa gat gtt gct att aaa 371

Gly Val Val Cys Lys Ala Lys Trp Arg Ala Lys Asp Val Ala Ile Lys

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caa ata gaa agt gaa tct gag agg aaa gcg ttt att gta gag ctt cgg 419

Gln Ile Glu Ser Glu Ser Glu Arg Lys Ala Phe Ile Val Glu Leu Arg

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cag tta tcc cgt gtg aac cat cct aat att gta aag ctt tat gga gcc 467

Gln Leu Ser Arg Val Asn His Pro Asn Ile Val Lys Leu Tyr Gly Ala

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tgc ttg aat cca gtg tgt ctt gtg atg gaa tat gct gaa ggg ggc tct 515

Cys Leu Asn Pro Val Cys Leu Val Met Glu Tyr Ala Glu Gly Gly Ser

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tta tat aat gtg ctg cat ggt gct gaa cca ttg cca tat tat act gct 563

Leu Tyr Asn Val Leu His Gly Ala Glu Pro Leu Pro Tyr Tyr Thr Ala

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gcc cac gca atg agt tgg tgt tta cag tgt tcc caa gga gtg gct tat 611

Ala His Ala Met Ser Trp Cys Leu Gln Cys Ser Gln Gly Val Ala Tyr

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ctt cac agc atg caa ccc aaa gcg cta att cac agg gac ctg aaa cca 659

Leu His Ser Met Gln Pro Lys Ala Leu Ile His Arg Asp Leu Lys Pro

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cca aac tta ctg ctg gtt gca ggg ggg aca gtt cta aaa att tgt gat			707
Pro Asn Leu Leu Leu Val Ala Gly Gly Thr Val Leu Lys Ile Cys Asp			
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ttt ggt aca gcc tgt gac att cag aca cac atg acc aat aac aag ggg			755
Phe Gly Thr Ala Cys Asp Ile Gln Thr His Met Thr Asn Asn Lys Gly			
	180	185	190
agt gct gct tgg atg gca cct gaa gtt ttt gaa ggt agt aat tac agt			803
Ser Ala Ala Trp Met Ala Pro Glu Val Phe Glu Gly Ser Asn Tyr Ser			
	195	200	205
gaa aaa tgt gac gtc ttc agc tgg ggt att att ctt tgg gaa gtg ata			851
Glu Lys Cys Asp Val Phe Ser Trp Gly Ile Ile Leu Trp Glu Val Ile			
	210	215	220
acg cgt cgg aaa ccc ttt gat gag att ggt ggc cca gct ttc cga atc			899
Thr Arg Arg Lys Pro Phe Asp Glu Ile Gly Gly Pro Ala Phe Arg Ile			
	225	230	235
atg tgg gct gtt cat aat ggt act cga cca cca ctg ata aaa aat tta			947
Met Trp Ala Val His Asn Gly Thr Arg Pro Pro Leu Ile Lys Asn Leu			
240	245	250	255

cct aag ccc att gag agc ctg atg act cgt tgt tgg tct aaa gat cct 995

Pro Lys Pro Ile Glu Ser Leu Met Thr Arg Cys Trp Ser Lys Asp Pro

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tcc cag cgc cct tca atg gag gaa att gtg aaa ata atg act cac ttg 1043

Ser Gln Arg Pro Ser Met Glu Glu Ile Val Lys Ile Met Thr His Leu

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atg cgg tac ttt cca gga gca gat gag cca tta cag tat cct tgt cag 1091

Met Arg Tyr Phe Pro Gly Ala Asp Glu Pro Leu Gln Tyr Pro Cys Gln

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tat tca gat gaa gga cag agc aac tct gcc acc agt aca ggc tca ttc 1139

Tyr Ser Asp Glu Gly Gln Ser Asn Ser Ala Thr Ser Thr Gly Ser Phe

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atg gac att gct tct aca aat acg agt aac aaa agt gac act aat atg 1187

Met Asp Ile Ala Ser Thr Asn Thr Ser Asn Lys Ser Asp Thr Asn Met

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gag caa gtt cct gcc aca aat gat act att aag cgc tta gaa tca aaa 1235

Glu Gln Val Pro Ala Thr Asn Asp Thr Ile Lys Arg Leu Glu Ser Lys

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ttg ttg aaa aat cag gca aag caa cag agt gaa tct gga cgt tta agc 1283

Leu Leu Lys Asn Gln Ala Lys Gln Gln Ser Glu Ser Gly Arg Leu Ser

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ttg gga gcc tcc cat ggg agc agt gtg gag agc ttg ccc cca acc tct			1331
Leu Gly Ala Ser His Gly Ser Ser Val Glu Ser Leu Pro Pro Thr Ser			
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gag ggc aag agg atg agt gct gac atg tct gaa ata gaa gct agg atc			1379
Glu Gly Lys Arg Met Ser Ala Asp Met Ser Glu Ile Glu Ala Arg Ile			
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gcc gca acc aca ggc aac gga cag cca aga cgt aga tcc atc caa gac			1427
Ala Ala Thr Thr Gly Asn Gly Gln Pro Arg Arg Arg Ser Ile Gln Asp			
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ttg act gta act gga aca gaa cct ggt cag gtg agc agt agg tca tcc			1475
Leu Thr Val Thr Gly Thr Glu Pro Gly Gln Val Ser Ser Arg Ser Ser			
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agt ccc agt gtc aga atg att act acc tca gga cca acc tca gaa aag			1523
Ser Pro Ser Val Arg Met Ile Thr Thr Ser Gly Pro Thr Ser Glu Lys			
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Pro Thr Arg Ser His Pro Trp Thr Pro Asp Asp Ser Thr Asp Thr Asn			
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gga tca gat aac tcc atc cca atg gct tat ctt aca ctg gat cac caa 1619

Gly Ser Asp Asn Ser Ile Pro Met Ala Tyr Leu Thr Leu Asp His Gln

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cta cag cct cta gca ccg tgc cca aac tcc aaa gaa tct atg gca gtg 1667

Leu Gln Pro Leu Ala Pro Cys Pro Asn Ser Lys Glu Ser Met Ala Val

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ttt gaa cag cat tgt aaa atg gca caa gaa tat atg aaa gtt caa aca 1715

Phe Glu Gln His Cys Lys Met Ala Gln Glu Tyr Met Lys Val Gln Thr

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gaa att gca ttg tta tta cag aga aag caa gaa cta gtt gca gaa ctg 1763

Glu Ile Ala Leu Leu Leu Gln Arg Lys Gln Glu Leu Val Ala Glu Leu

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gac cag gat gaa aag gac cag caa aat aca tct cgc ctg gta cag gaa 1811

Asp Gln Asp Glu Lys Asp Gln Gln Asn Thr Ser Arg Leu Val Gln Glu

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cat aaa aag ctt tta gat gaa aac aaa agc ctt tct act tac tac cag 1859

His Lys Lys Leu Leu Asp Glu Asn Lys Ser Leu Ser Thr Tyr Tyr Gln

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caa tgc aaa aaa caa cta gag gtc atc aga agt cag cag cag aaa cga 1907

Gln Cys Lys Lys Gln Leu Glu Val Ile Arg Ser Gln Gln Gln Lys Arg

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caa ggc act tca tgattctctg ggaccgttac attttgaaat atgcaaagaa 1959

Gln Gly Thr Ser

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<213> Homo sapiens

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Tyr Lys Glu Ile Glu Val Glu Glu Val Val Gly Arg Gly Ala Phe Gly

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45

Val Val Cys Lys Ala Lys Trp Arg Ala Lys Asp Val Ala Ile Lys Gln

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Ile Glu Ser Glu Ser Glu Arg Lys Ala Phe Ile Val Glu Leu Arg Gln

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Leu Ser Arg Val Asn His Pro Asn Ile Val Lys Leu Tyr Gly Ala Cys

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Leu Asn Pro Val Cys Leu Val Met Glu Tyr Ala Glu Gly Gly Ser Leu

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Tyr Asn Val Leu His Gly Ala Glu Pro Leu Pro Tyr Tyr Thr Ala Ala

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His Ala Met Ser Trp Cys Leu Gln Cys Ser Gln Gly Val Ala Tyr Leu

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His Ser Met Gln Pro Lys Ala Leu Ile His Arg Asp Leu Lys Pro Pro

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160

Asn Leu Leu Leu Val Ala Gly Gly Thr Val Leu Lys Ile Cys Asp Phe

165

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Gly Thr Ala Cys Asp Ile Gln Thr His Met Thr Asn Asn Lys Gly Ser

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Ala Ala Trp Met Ala Pro Glu Val Phe Glu Gly Ser Asn Tyr Ser Glu

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Lys Cys Asp Val Phe Ser Trp Gly Ile Ile Leu Trp Glu Val Ile Thr

210

215

220

Arg Arg Lys Pro Phe Asp Glu Ile Gly Gly Pro Ala Phe Arg Ile Met

225 230 235 240

Trp Ala Val His Asn Gly Thr Arg Pro Pro Leu Ile Lys Asn Leu Pro

245 250 255

Lys Pro Ile Glu Ser Leu Met Thr Arg Cys Trp Ser Lys Asp Pro Ser

260 265 270

Gln Arg Pro Ser Met Glu Glu Ile Val Lys Ile Met Thr His Leu Met

275 280 285

Arg Tyr Phe Pro Gly Ala Asp Glu Pro Leu Gln Tyr Pro Cys Gln Tyr

290 295 300

Ser Asp Glu Gly Gln Ser Asn Ser Ala Thr Ser Thr Gly Ser Phe Met

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Asp Ile Ala Ser Thr Asn Thr Ser Asn Lys Ser Asp Thr Asn Met Glu

325 330 335

Gln Val Pro Ala Thr Asn Asp Thr Ile Lys Arg Leu Glu Ser Lys Leu

340 345 350

Leu Lys Asn Gln Ala Lys Gln Gln Ser Glu Ser Gly Arg Leu Ser Leu

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365

Gly Ala Ser His Gly Ser Ser Val Glu Ser Leu Pro Pro Thr Ser Glu

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Gly Lys Arg Met Ser Ala Asp Met Ser Glu Ile Glu Ala Arg Ile Ala

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Ala Thr Thr Gly Asn Gly Gln Pro Arg Arg Arg Ser Ile Gln Asp Leu

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Thr Val Thr Gly Thr Glu Pro Gly Gln Val Ser Ser Arg Ser Ser Ser

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Pro Ser Val Arg Met Ile Thr Thr Ser Gly Pro Thr Ser Glu Lys Pro

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Thr Arg Ser His Pro Trp Thr Pro Asp Asp Ser Thr Asp Thr Asn Gly

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Ser Asp Asn Ser Ile Pro Met Ala Tyr Leu Thr Leu Asp His Gln Leu

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Gln Pro Leu Ala Pro Cys Pro Asn Ser Lys Glu Ser Met Ala Val Phe

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Glu Gln His Cys Lys Met Ala Gln Glu Tyr Met Lys Val Gln Thr Glu

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Ile Ala Leu Leu Leu Gln Arg Lys Gln Glu Leu Val Ala Glu Leu Asp

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Gln Asp Glu Lys Asp Gln Gln Asn Thr Ser Arg Leu Val Gln Glu His

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540

Lys Lys Leu Leu Asp Glu Asn Lys Ser Leu Ser Thr Tyr Tyr Gln Gln

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Cys Lys Lys Gln Leu Glu Val Ile Arg Ser Gln Gln Gln Lys Arg Gln

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Gly Thr Ser

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<213> Homo sapiens

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Leu Gln Ser Glu Gln Gln Pro Ser Trp Thr Asp Asp Leu Pro Leu Cys

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cac ctc tct ggg gtt ggc tca gcc tcc aac cgc agc tac tct gct gat 149

His Leu Ser Gly Val Gly Ser Ala Ser Asn Arg Ser Tyr Ser Ala Asp

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ggc aag ggc act gag agc cac ccg cca gag gac agc tgg ctc aag ttc 197

Gly Lys Gly Thr Glu Ser His Pro Pro Glu Asp Ser Trp Leu Lys Phe

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agg agt gag aac aac tgc ttc ctg tat ggg gtc ttc aac ggc tat gat 245

Arg Ser Glu Asn Asn Cys Phe Leu Tyr Gly Val Phe Asn Gly Tyr Asp

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ggc aac cga gtg acc aac ttc gtg gcc cag cgg ctg tcc gca gag ctc 293

Gly Asn Arg Val Thr Asn Phe Val Ala Gln Arg Leu Ser Ala Glu Leu

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ctg ctg ggc cag ctg aat gcc gag cac gcc gag gcc gat gtg cgg cgt 341
 Leu Leu Gly Gln Leu Asn Ala Glu His Ala Glu Ala Asp Val Arg Arg
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gtg ctg ctg cag gcc ttc gat gtg gtg gag agg agc ttc ctg gag tcc 389
 Val Leu Leu Gln Ala Phe Asp Val Val Glu Arg Ser Phe Leu Glu Ser
 105 110 115 120

att gac gac gcc ttg gct gag aag gca agc ctc cag tcg caa ttg cca 437
 Ile Asp Asp Ala Leu Ala Glu Lys Ala Ser Leu Gln Ser Gln Leu Pro
 125 130 135

gag gga gtc cct cag cac cag ctg cct cct cag tat cag aag atc ctt 485
 Glu Gly Val Pro Gln His Gln Leu Pro Pro Gln Tyr Gln Lys Ile Leu
 140 145 150

gag aga ctc aag acg tta gag agg gaa att tcg gga ggg gcc atg gcc 533
 Glu Arg Leu Lys Thr Leu Glu Arg Glu Ile Ser Gly Gly Ala Met Ala
 155 160 165

gtt gtg gcg gtc ctt ctc aac aac aag ctc tac gtc gcc aat gtc ggt 581
 Val Val Ala Val Leu Leu Asn Asn Lys Leu Tyr Val Ala Asn Val Gly
 170 175 180

aca aac cgt gca ctt tta tgc aaa tcg aca gtg gat ggg ttg cag gtg 629

Thr Asn Arg Ala Leu Leu Cys Lys Ser Thr Val Asp Gly Leu Gln Val

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aca cag ctg aac gtg gac cac acc aca gag aac gag gat gag ctc ttc 677

Thr Gln Leu Asn Val Asp His Thr Thr Glu Asn Glu Asp Glu Leu Phe

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cgt ctt tcg cag ctg ggc ttg gat gct gga aag atc aag cag gtg ggg 725

Arg Leu Ser Gln Leu Gly Leu Asp Ala Gly Lys Ile Lys Gln Val Gly

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atc atc tgt ggg cag gag agc acc cgg cgg atc ggg gat tac aag gtt 773

Ile Ile Cys Gly Gln Glu Ser Thr Arg Arg Ile Gly Asp Tyr Lys Val

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245

aaa tat ggc tac acg gac att gac ctt ctc agc gct gcc aag tcc aaa 821

Lys Tyr Gly Tyr Thr Asp Ile Asp Leu Leu Ser Ala Ala Lys Ser Lys

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255

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cca atc atc gca gag cca gaa atc cat ggg gca cag ccg ctg gat ggg 869

Pro Ile Ile Ala Glu Pro Glu Ile His Gly Ala Gln Pro Leu Asp Gly

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gtg acg ggc ttc ttg gtg ctg atg tcg gag ggg ttg tac aag gcc cta 917

Val Thr Gly Phe Leu Val Leu Met Ser Glu Gly Leu Tyr Lys Ala Leu

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gag gca gcc cat ggg cct ggg cag gcc aac cag gag att gct gcg atg 965

Glu Ala Ala His Gly Pro Gly Gln Ala Asn Gln Glu Ile Ala Ala Met

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att gac act gag ttt gcc aag cag acc tcc ctg gac gca gtg gcc cag 1013

Ile Asp Thr Glu Phe Ala Lys Gln Thr Ser Leu Asp Ala Val Ala Gln

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gcc gtc gtg gac cgg gtg aag cgc atc cac agc gac acc ttc gcc agt 1061

Ala Val Val Asp Arg Val Lys Arg Ile His Ser Asp Thr Phe Ala Ser

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ggc ggg gag cgt gcc agg ttc tgc ccc cgg cac gag gac atg acc ctg 1109

Gly Gly Glu Arg Ala Arg Phe Cys Pro Arg His Glu Asp Met Thr Leu

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cta gtg agg aac ttt ggc tac ccg ctg ggc gaa atg agc cag ccc aca 1157

Leu Val Arg Asn Phe Gly Tyr Pro Leu Gly Glu Met Ser Gln Pro Thr

365

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ccg agc cca gcc cca gct gca gga gga cga gtg tac cct gtg tct gtg 1205

Pro Ser Pro Ala Pro Ala Ala Gly Gly Arg Val Tyr Pro Val Ser Val

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cca tac tcc agc gcc cag agc acc agc aag acc agc gtg acc ctc tcc 1253

Pro Tyr Ser Ser Ala Gln Ser Thr Ser Lys Thr Ser Val Thr Leu Ser

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ctt gtc atg ccc tcc cag ggc cag atg gtc aac ggg gct cac agt gct 1301

Leu Val Met Pro Ser Gln Gly Gln Met Val Asn Gly Ala His Ser Ala

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tcc acc ctg gac gaa gcc acc ccc acc ctc acc aac caa agc ccg acc 1349

Ser Thr Leu Asp Glu Ala Thr Pro Thr Leu Thr Asn Gln Ser Pro Thr

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tta acc ctg cag tcc acc aac acg cac acg cag agc agc agc tcc agc 1397

Leu Thr Leu Gln Ser Thr Asn Thr His Thr Gln Ser Ser Ser Ser Ser

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tct gac gga ggc ctc ttc cgc tcc cgg ccc gcc cac tcg ctc ccg cct 1445

Ser Asp Gly Gly Leu Phe Arg Ser Arg Pro Ala His Ser Leu Pro Pro

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ggc gag gac ggt cgt gtt gag ccc tat gtg gac ttt gct gag ttt tac 1493

Gly Glu Asp Gly Arg Val Glu Pro Tyr Val Asp Phe Ala Glu Phe Tyr

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cgc ctc tgg agc gtg gac cat ggc gag cag agc gtg gtg aca gca ccg 1541

Arg Leu Trp Ser Val Asp His Gly Glu Gln Ser Val Val Thr Ala Pro

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<210> 4

<211> 504

<212> PRT

<213> Homo sapiens

<400> 4

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Trp Thr Asp Asp Leu Pro Leu Cys His Leu Ser Gly Val Gly Ser Ala

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Ser Asn Arg Ser Tyr Ser Ala Asp Gly Lys Gly Thr Glu Ser His Pro

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Pro Glu Asp Ser Trp Leu Lys Phe Arg Ser Glu Asn Asn Cys Phe Leu

50

55

60

Tyr Gly Val Phe Asn Gly Tyr Asp Gly Asn Arg Val Thr Asn Phe Val

65

70

75

80

Ala Gln Arg Leu Ser Ala Glu Leu Leu Leu Gly Gln Leu Asn Ala Glu

85

90

95

His Ala Glu Ala Asp Val Arg Arg Val Leu Leu Gln Ala Phe Asp Val

100

105

110

Val Glu Arg Ser Phe Leu Glu Ser Ile Asp Asp Ala Leu Ala Glu Lys

115

120

125

Ala Ser Leu Gln Ser Gln Leu Pro Glu Gly Val Pro Gln His Gln Leu

130

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140

Pro Pro Gln Tyr Gln Lys Ile Leu Glu Arg Leu Lys Thr Leu Glu Arg

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155

160

Glu Ile Ser Gly Gly Ala Met Ala Val Val Ala Val Leu Leu Asn Asn

165

170

175

Lys Leu Tyr Val Ala Asn Val Gly Thr Asn Arg Ala Leu Leu Cys Lys

180

185

190

Ser Thr Val Asp Gly Leu Gln Val Thr Gln Leu Asn Val Asp His Thr

195

200

205

Thr Glu Asn Glu Asp Glu Leu Phe Arg Leu Ser Gln Leu Gly Leu Asp

210

215

220

Ala Gly Lys Ile Lys Gln Val Gly Ile Ile Cys Gly Gln Glu Ser Thr

225

230

235

240

Arg Arg Ile Gly Asp Tyr Lys Val Lys Tyr Gly Tyr Thr Asp Ile Asp

245

250

255

Leu Leu Ser Ala Ala Lys Ser Lys Pro Ile Ile Ala Glu⁻Pro Glu Ile

260

265

270

His Gly Ala Gln Pro Leu Asp Gly Val Thr Gly Phe Leu Val Leu Met

275

280

285

Ser Glu Gly Leu Tyr Lys Ala Leu Glu Ala Ala His Gly Pro Gly Gln

290

295

300

Ala Asn Gln Glu Ile Ala Ala Met Ile Asp Thr Glu Phe Ala Lys Gln

305

310

315

320

Thr Ser Leu Asp Ala Val Ala Gln Ala Val Val Asp Arg Val Lys Arg

325

330

335

Ile His Ser Asp Thr Phe Ala Ser Gly Gly Glu Arg Ala Arg Phe Cys

340

345

350

Pro Arg His Glu Asp Met Thr Leu Leu Val Arg Asn Phe Gly Tyr Pro

355

360

365

Leu Gly Glu Met Ser Gln Pro Thr Pro Ser Pro Ala Pro Ala Ala Gly

370

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380

Gly Arg Val Tyr Pro Val Ser Val Pro Tyr Ser Ser Ala Gln Ser Thr

385

390

395

400

Ser Lys Thr Ser Val Thr Leu Ser Leu Val Met Pro Ser Gln Gly Gln

405

410

415

Met Val Asn Gly Ala His Ser Ala Ser Thr Leu Asp Glu Ala Thr Pro

420

425

430

Thr Leu Thr Asn Gln Ser Pro Thr Leu Thr Leu Gln Ser Thr Asn Thr

435

440

445

His Thr Gln Ser Ser Ser Ser Ser Ser Asp Gly Gly Leu Phe Arg Ser

450

455

460

Arg Pro Ala His Ser Leu Pro Pro Gly Glu Asp Gly Arg Val Glu Pro

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Tyr Val Asp Phe Ala Glu Phe Tyr Arg Leu Trp Ser Val Asp His Gly

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Glu Gln Ser Val Val Thr Ala Pro

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<212> DNA

<213> Artificial Sequence

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Synthesized Primer Sequence

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<213> Artificial Sequence

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Synthesized Primer Sequence

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<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Artificially
Synthesized Primer Sequence

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<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Artificially
Synthesized Primer Sequence

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<210> 9

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<212> DNA

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<223> Description of Artificial Sequence: Artificially
Synthesized Primer Sequence

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<212> DNA

<213> Artificial Sequence

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Synthesized Primer Sequence

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